

indeterminate country. It has perhaps as much strategic advantage as could be expected, and it agrees very closely with the line which seemed indicated on an impartial discussion of the facts before the Plebiscite was taken. One may hope, therefore, that the new boundary will be found to satisfy the legitimate aspirations of both sides.

A. R. H.

THE HISTORICAL GEOGRAPHY OF NORTHERN EURASIA

THE Geographical Introduction to Mr. Baddeley's great work on Northern Asia, reviewed in general terms in the *Journal* for May, 1920, deserves somewhat fuller notice than it was then possible to give it. Therein the author sketches with a master hand the gradual unfolding of men's ideas about the mysterious regions which bordered the world of the ancients in the extreme north-east—the "Land of Darkness" of the Arab geographers. It is a fascinating story, alike in the early days when but a glimmer of light penetrated now and again to the civilized world through such media as the writings of Edrisi or the maps of the Pizzigani or Fra Mauro, and in the later times when, within a single century, the flood of Russian adventure burst over the whole width of Northern Asia to the Pacific shores. We can often only guess at the channels by which the early fragments of knowledge found their way to Europe, though no doubt the enterprise of merchant adventurers, particularly those of the Italian republics, played a foremost part in the process.

In briefly touching upon the reasons which so long kept the Russians from spreading over the plains of Asia, and which made them eventually choose the more northern route across the Urals, Mr. Baddeley suggests an explanation which at first smacks somewhat of a paradox. "Further south," he says, "the way was barred, not by any physical impediment, but by the very fact that there was none. The level plain kept Russia out of Asia because it gave Asia easy access to Russia. The question was, merely, upon which side was the population more numerous, more warlike? and in those days, in the open country, the balance was ever in favour of Asia. In the north the position was reversed, the Urals, a physical barrier, were easily passed, for beyond them, to the east, in the valleys of the Ob and the Irtish, at the period of Novgorodian expansion and in the days of Yermak, there was no organized power able to hold its own against bands of even a thousand well-armed, resolute men." He points out, however, that in ancient times an intimate connection did exist between South Russia and what is now Siberia, as is proved by the analogies between Siberian and Scythian art, and he quotes Mr. E. H. Minns as holding that "later Minusinsk art is identical with Scythic."

In the absence or scarcity of historical records, Mr. Baddeley has recourse to early cartography as the best means of tracing the gradual

extension of knowledge. He takes the principal documents of the kind in order, mentioning the additions made by each to the general store. For the regions south of Siberia Marco Polo is of course the main source, though it was not till 1375 that full use was made of his data, in the famous Catalan map. One or two of the earlier Portolan maps show some real knowledge of European Russia. Thus the Dulcert or Dalorto map of 1339 drew the Volga with western and eastern headstreams and with the names *Borga* (Edrisi's Bulgar) and *Castrama* (Kostroma) clearly marked. That of the Pizzigani brothers of 1367 shows the Volga in the same way and gives the name *Edil* for the eastern and *Tir* or *Tynis* for the western branch, with the town of *Tifer* (Tver) on the latter. Many other names of places are inserted, among them *Pascerty* (the *Basckird* of Edrisi, indicating the headquarters of the Bashkirs), *Sebur* (for Siber), the problematic *Marmorca*, and *Sacetim*, which in one form or another persist to the time of Mercator or even later. Fra Mauro's splendid map of 1457-59 gives much additional information, marred as regards topographical accuracy by his reversion to the circular disc theory of the Earth's form. Battista Agnese, by reproducing in his atlas of 1554 an otherwise lost map of 1525, supplies an interesting link in the chain of progress, but far more important is the map of Anton Wied of 1542, a remarkable document giving us distinctly new and genuine information, and containing quite a number of names which from this time take their place regularly in the maps. In Herberstein (1546) and Anthony Jenkinson (1562) we are again in touch with original sources, and further new names occur in Mercator's great map of 1569, copied so freely for nearly a century. They are mostly taken from a Russian Itinerary printed by Herberstein (given by Mr. Baddeley in a translation), though hardly utilized at all in Herberstein's own map. Isaac Massa's map of 1611-12, based on Russian sources, marks a great advance for north-western Siberia, but Sanson's maps of about the middle of the century, though giving a number of names, misplace them marvellously and mix them up with fantastic twelfth-century names taken from Edrisi. Ptolemy is long the main source for the mountains and rivers of Northern Asia, but from the time of Wied, Herberstein, and Jenkinson the Ob appears regularly, mostly as issuing from the large lake of "Kithay," and in the early seventeenth century the Yenesei takes its proper place.

The romance of the story is heightened by the various 'travellers' tales' which have become interwoven with the threads of fact in the early records. Of frequent recurrence is the story of the 'Golden Lady' (*Zlata* or *Zolataya Baba*), adored by skin-clad worshippers, in whom Mr. Baddeley finds "an obvious suggestion of a Christian origin," as possibly representing "the Virgin Mother, babe in arms, outshining over the snow and ice of that far northern land." The groping for light by the learned of the early seventeenth century is illustrated by a chapter of special interest, dealing with Ramusio's account of the discourse of a certain unnamed "gentil'-

huomo," at Fracastoro's country house overlooking the Lake of Garda—a discourse which, Mr. Baddeley says, "would immortalize his name did we but know it; for here in a few small pages we have—besides his own eloquent pleas for geographical exploration, and, more especially, for the discovery of both the North-East and North-West Passages—records of two personal conversations, each of very great interest, the one with Sebastian Cabot in Seville, the other with a Muscovite ambassador in Augsburg." * As previous English versions of Ramusio's story have been very inaccurate, Mr. Baddeley has done well to supply a revised translation. The Muscovite ambassador, whom the "gentil'huomo" had met at Augsburg in his youth, may be identified with Demetrius Gerassimoff, envoy to Pope Adrian VI., from whom the famous Paulus Jovius obtained the information on Russia published in 1525 in his now rare booklet *De legatione Basilii Magni Principis Moschouiae ad Clementem VII. Pont. Max.* This man, in urging the feasibility of the North-East Passage, called for a map "in which was the description of Muscovia and the provinces subject to the same," and by it made demonstration of the way to Cathay as leading past the province of Permia, the river Pescora, certain mountains called Catena Mundi [the Northern Urals, also known to the early map-makers as *Cingulum Terræ*], the province of Obdora "whereas is the Vecchiadoro" [the above-mentioned *Zlata baba*] and the river Obo rising in the great lake Chethai. Now as no map that we know of, from the first quarter of the sixteenth century, gives anything like this amount of information, the allusion puts a keen edge on our curiosity. The booklet of Paulus Jovius contained a map, it is true, but this, judging from Agnese's manuscript copy in his Atlas of 1554, by no means answers the description, even if it could have been in the hands of the Russian ambassador. We thus seem to have to do with one of the many lost maps of early times, the discovery of which would be of no small interest.

As examples of typical pre-Russian cartography of Northern Asia Mr. Baddeley gives excellent reproductions of the maps of Ortelius (1570) and Janssonius (1567), with translations of their legends. But he rightly insists on the monstrous distortions and scraps of legendary gossip which characterize these, and set in clear relief the revolution caused by the first maps of Russian surveyors, from Godunoff onwards, imperfect as these were judged by modern standards. The history and analysis of these Russian maps form the largest and most important part of the geographical introduction. The subject has never before been approached with anything like Mr. Baddeley's thoroughness, and we have now for the first time a full record of facts, sifted with the utmost care, in

* On the identity of the "Gentil'huomo" see Fiorini: "Qualche cenno sopra Girolamo Fracastoro" in *Rivista Geogr. Italiana*, 1900, pp. 441-449. Fiorini holds that the geographical discourse was Ramusio's own, put into the mouth of an imaginary person, but his arguments are not altogether convincing. (See also article by Prof. S. Grande in *Memorie della Soc. Geogr. Italiana*, vol. 12, 1905.)

a shape to render further investigations (for such, Mr. Baddeley insists, will still be needed) comparatively easy. The circumstances under which they came to be made give a special interest to these early Russian maps. With the rapidly growing relations between Russia and Siberia in the seventeenth century the Tsar Alexei Mikhailovich naturally felt the want of a map, and, tsar-like, gave orders to his representative in Siberia to supply one. "It mattered nothing that the country was entirely unsurveyed, that neither the instruments nor the learning requisite for scientific map-making were forthcoming. Rough and ready means were to hand. . . . the evidence of trappers, traders, and others, Russians and natives, speaking many tongues; where they had been, in what circumstances, with names of places and peoples, and of mountains and rivers, and, above all, the distances traversed; or, what was much more to the point, the number of hours or days it took to go from place to place in given conditions. . . . The result of map-making in this way, by inquiry, is before us in the Godunof and Remezoff maps." And the extent and relative correctness of the information so obtained is certainly surprising. Of the Godunof map, made in 1667 and itself lost, we can fortunately get a good idea from copies made by Swedes connected with political missions to Moscow—Cronman, Prutz, and Palmqvist, all of which Mr. Baddeley reproduces, in substance or facsimile. The "ethnographical map" of 1673, which is reproduced in the colours of the original, is a remarkable specimen, specially constructed "to show the localities, districts, countries, inhabited by the various tribes and nations in Eastern Russia and Middle and Northern Asia, from Moscow to the Pacific Ocean; and . . . we may claim that it does so with astonishing fulness and accuracy. Of its ninety odd names the majority are those of peoples, and amongst them figure, for the first time, on any map," the most important race-names of the whole of that vast area. Geographically, too, it marks an important advance, though with obvious resemblances to the Godunof map. It is preserved in the (MS.) Remezoff Atlas of 1701, but Mr. Baddeley gives good reason for thinking that, besides being earlier than most of the Atlas, it may not have been the work of Remezoff at all.

The next important map was that of the famous Dutch Burgomaster, Witsen, whose book on 'Northern and Eastern Tartary,' in its first edition of 1692, "is one of the rarest of all printed books." With all its shortcomings, Witsen's map, Mr. Baddeley thinks, "marks the most important addition ever made at one time to the cartographical knowledge of Northern Asia." His Swedish detractor, Strahlenberg, who in bringing out his own map had the advantage of forty years' additions to knowledge, "made blunders at least as great and less excusable." The comparative merits of the two maps are well shown in a sketch-map in which their outlines are traced in different colours and contrasted with the facts as we now know them. The Remezoff maps are next fully discussed and a chronology is made out of that cartographer's labours from 1696 to 1701,

in which latter year his Atlas of twenty-four sheets was completed. The translations of the prefatory notes accompanying the maps give a clear insight into the circumstances in which they were made. Two of them were wall-maps of an imposing size, one of which, formerly in the Ekaterinhof Palace at Petrograd, has of late been in the care of the Russian Geographical Society. In spite of the fine appearance and detailed character of Remezoff's maps they repeated errors of earlier maps for which there was now no excuse, and Mr. Baddeley is forced to conclude that "he [Remezoff] was after all nothing better than a phenomenally careless and ignorant compiler from other men's information and maps."

The so-called Renat maps, to which much attention has been given in Sweden by Sven Hedin and others, meet with equally careful analysis, and many misconceptions about them are thus cleared away. It is only of late years that the original maps have been brought to light, some of the early commentators having had nothing better to go upon than the poor photograph of a copy of a copy, and having therefore done but scant justice to the subject. Mr. Baddeley's thoroughness is shown by the special journeys undertaken by him to inspect the originals, of which he supplies the first adequate reproductions. He brings together all that is known of Renat—a Swedish gunner taken prisoner at Pultova, who, after being sent into exile in Siberia, was captured a second time by the Kalmuks, and lived for seventeen years in the wilds of Central Asia. On his return to Europe he brought with him two maps, in Kalmuk character, given him by the enlightened ruler of that nation—the "Kontai-sha" Galdan Tseren. One was of Sungaria, said by him to be the work of Galdan Tseren himself, the other of a larger part of Central Asia copied by the Kalmuks from a Chinese map taken in a fight. The first map was copied by Renat in a Swedish version, and his copy again copied by Benzelstierna, whose version was for a time the only one known. The origin of the map offers an interesting problem, for, even with the help of the European and Chinese prisoners on whose aid the Kalmuk ruler could rely, it is not very easy, as Mr. Baddeley says, to believe in its Kalmuk origin. Yet Renat's own authorship is out of the question, and the two remaining alternatives—of a Russian or Chinese authorship—are negatived by cogent considerations. There is no known Russian material which could have served as its basis, while, as is shown by a detailed study of the Chinese maps of the Jesuits (most valuable on its own account), none of these at the time had extended to Sungaria. The second or Chinese map gives information much of which must have been in the hands of the Jesuit fathers, not based however upon their travels and surveys. Mr. Baddeley concludes that, "apart from what originality it may possess," this map "is of interest as a contemporary Kalmuk version—with, probably, considerable improvements in the western half—of what the Chinese had with them on their frontier campaign against

the Kalmuks . . . ; and, in spite of all defects, the amount and correctness of the information it gives, compared to anything else that we have of that time and country, is astonishing." These maps are certainly of unusual importance, and their study is made easy by key-maps, to the first of which the author has added a degree net and outline of the geography as now known, showing in a remarkable way the general accuracy. Previous adverse criticism, Mr. Baddeley shows, has been due to the erroneous numeration of the degrees in the margin of Benzelstiena's copy, the figures representing, not one degree each, but two. For all the maps described complete tables of the names and legends are given.

Attention has here been called to but a relatively small part of the book, but none of it is without interest to the geographer, and the narratives of the travellers, given in the second volume, would well deserve to be dealt with at length did limits of space permit. Whilst most of the envoys were illiterate "Cossacks," whose stories are simple, even rude, in style and matter-of-fact in content, the Wallachian-Greek Spathary stands apart as among the erudite men of his day, and his narrative, Mr. Baddeley thinks, may have a special significance in Russian literature, apart from its value as a contribution to political and geographical knowledge. In the latter respect it "forms a body of topographical information on Northern Asia remarkable for its extent and accuracy, to which, at the time it was written, there was no parallel in Russian literature, nor, if we except China proper, in the literature of the world." The author has done a service to his memory by recovering for him the credit due for his careful account of the land routes to China, never before printed in full, and hitherto wrongly attributed to the Jesuit Avril. All the journeys described are suitably elucidated by notes and maps, particularly useful being the map of the region of the Upper Yenesei illustrating the various journeys to the Altin ("golden") Khans. For this, as for general help in making out the routes of the travellers, Mr. Baddeley acknowledges his indebtedness to Mr. D. Carruthers, whose unique personal knowledge of the country has been freely placed at his disposal.

E. HEAWOOD.

REVIEWS.

EUROPE

A General Review of the Netherlands.— (A series of 25 pamphlets.) The Netherlands Ministry of Agriculture, Industry, and Commerce at the Hague. 1915. *Sketch-maps and Illustrations.*

HERE is the raw material for a comprehensive economic and social geography of Holland. These small volumes deal, *inter alia*, with agriculture, horticulture (under the ambiguous title "Nurseries"), industries, trade, fisheries, education, science, literature, arts, sport, public health, and social movements. Each is written by a specialist, and the series is well illustrated. The geographer can here obtain in an authoritative form the detailed information and